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| 10/810,979 | 03/26/2004 | Russell Bonaventura | LEAP:133 US | 9629 |

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| EXAMINER |
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LAVARIAS, ARNEL C

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| ART UNIT | PAPER NUMBER |
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2872

DATE MAILED: 11/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/810,979

Applicant(s)

BONAVENTURA ET AL.

Examiner

Arnel C. Lavarias

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-36 is/are pending in the application.
- 4a) Of the above claim(s) 2,5-7,17,19,22,23 and 26-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,8-16,18,20,21,24,25,35 and 36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/29/06 has been entered.

Response to Amendment

2. The amendments to Claims 1 and 21 in the submission dated 9/29/06 are acknowledged and accepted. In view of these amendments, the objections to the claims in Sections 8-9 of the Office Action dated 8/1/06 are respectfully withdrawn.
3. The addition of Claims 35-36 in the submission dated 9/29/06 is acknowledged and accepted.

Response to Arguments

4. The Applicants' arguments filed 9/29/06 have been fully considered but they are not persuasive.
5. The Applicants argue that, with respect to newly amended Claim 1, as well as Claims 3, 8-16, 18, 20, 24-25 which depend on Claim 1, Kawashima fails to teach

or reasonably suggest a drive means for a carriage and a stage that are shielded by the bottom side of the stage throughout the full range of motion of the carriage and the stage. The Examiner respectfully disagrees. As previously set forth in Section 11 of the Office Action dated 8/1/06, Kawashima specifically discloses drive means for a stage and a carriage (See specifically stage 1, 5 in Figures 1-3; carriage 17, 3, 15 in Figures 3-5; drive means 19, 23 in Figure 1, as well as Figure 6). The drive means includes the following elements: 19, 23, 24, 22, 25, 27, 29, 30, 31, 13, 18 in Figures 1 and 6. All of these elements are located on the bottom side of the stage (See specifically 5 in Figure 2). In addition, since the bottom side of the stage 5 is fixed, and the drive means are all variously attached to the bottom side of the stage 5, the drive means will always be located on the bottom side of the stage throughout the full range of motion of both the stage and carriage (i.e. by turning knobs 19 and 23). Further, the carriage includes bearings (See specifically 16 in Figure 3) which is also located on the bottom side of the stage 5. Thus, the bearings for the carriage will also be located on the bottom side of the stage throughout the full motion of the stage and the carriage. Finally, since the drive means is located at the bottom side of the stage 5, the drive means will be shielded, at least in part, by the bottom side of the stage 5. The Examiner notes that features upon which applicant relies (i.e., shielding against dust and debris accumulation) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Finally, the Examiner notes that the drive means of Kawashima

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is as much shielded by the bottom of the stage as Applicants' own drive means, since both the drive means of Kawashima and the drive means of Applicants' disclosed assembly extend out beyond the edge of the stage (See specifically Figure 2 in Applicants' appendix in the response filed 9/29/06 regarding the drive means extending out beyond the stage of Kawashima; See also Figures 9-10 of Applicants' own disclosure, which explicitly shows the drive means (e.g. 18, 20 in Figure 10) extending out beyond the stage (e.g. 66 in Figures 9-10)).

6. The Examiner additionally notes that, in view of the above discussion, Applicants' arguments regarding newly submitted Claim 36 is moot, since Applicants' disclosure fails to provide any support for the limitation of a drive means for a stage being *completely* shielded by the bottom of the stage, relative to the stage being viewed from a position above the stage, throughout the full range of motion of the stage.

7. Claims 1, 3, 8-16, 18, 20-21, 24-25, 35-36 are now rejected as follows.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claims 1, 3, 8-16, 18, 20-21, 24-25, 35-36 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the

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inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 1 and 36 both recite the limitation of ‘...said drive means for said carriage and stage are shielded by said bottom side of said stage *throughout the full range of motion* of said carriage and stage...’ (Emphasis added). Neither the specification nor drawings of the instant disclosure show what the full range of motion of the carriage and stage are, and thus is not possible to determine from the disclosure whether the drive means for the carriage and stage are shielded by the bottom side of the stage throughout the full range of motion of the carriage and stage. In addition, Figures 6-8 appear to depict that stage mounting plate 34 may be slid/moved far enough away from stage 14 that racks 38 and 40 may no longer be shielded by the bottom side of the stage at all.

10. Claim 36 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 36 recites the limitation of ‘...said drive means for said carriage and stage are *completely* shielded by said bottom side of said stage, relative to said stage being viewed from a position above said stage, throughout the full range of motion of said carriage and stage...’ (Emphasis added). Neither the specification nor drawings of the instant disclosure discuss or show *complete* shielding of the drive means by the bottom side of the stage. For example, Figures 9-10 of the

instant disclosure show that there is no complete shielding of the drive means since knobs 18 and 20 extend beyond the edge 66 of the stage.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 1, 3, 8, 18, 20-21, and 35, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Kawashima (U.S. Patent No. 3572888), of record.

Kawashima discloses a microscope stage assembly (See Figures 1-6) for a microscope (See for example Abstract), comprising a stage (See for example 1, 5 in Figures 1-3) having a top side and a bottom side; an opening (See 37, 38 in Figures 4-5) in the stage in the form of a linear slot; a carriage (See 17, 3, 15 in Figures 3-5) positioned adjacent to the slot for movement in a direction generally parallel with the slot; a drive means (See for example 19, 23 in Figure 2; See also associated gears in Figures 2, 6) operatively arranged to move the carriage and the stage, wherein the drive means for the carriage and stage are shielded by the bottom side of the stage (See for example 5 in Figure 2) throughout the full range of motion of the carriage and stage, and the carriage and bearings (See for example 16 in Figure 3) for the carriage are shielded by the bottom side of the stage throughout the full range of motion of the carriage and stage; a specimen

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retaining means (See 2, 2a, 2b in Figure 1) on the top side of the stage, wherein the specimen retaining means is removably attached (See for example 14, 17 in Figure 3) to the carriage through the opening in the stage. Kawashima further discloses a stage mounting plate for mounting the assembly to a microscope (See for example 5, 9 in Figure 2); a microscope comprising the stage drive assembly (See Abstract); a first engagement means (See for example 25 or 27 in Figures 2, 6) for a microscope stage drive mechanism (See for example 19, 23 in Figures 2, 6) at a first location on the stage, and a second engagement means (See for example 25 or 27 in Figures 2, 6) for the microscope stage drive mechanism at a second location on the stage; and the assembly including drive means for movement of the stage relative to the mounting plate in a y-axis (See for example 23 in Figures 2, 6).

13. Claims 9-10, 13, 15, 24, as best understood, are rejected under 35

U.S.C. 102(b) as being anticipated by Kawashima.

Kawashima discloses the invention as set forth above in Section 11.

Kawashima additionally discloses the first location further comprising the microscope stage drive mechanism and a rack (See for example 19, 22, 25, 30, 13 in Figures 2, 6) operatively arranged to engage the microscope stage drive mechanism for movement of the stage in a y-axis; the rack mounted to the stage mounting plate (See 30, 13 in Figures 2, 6), the microscope stage drive mechanism and the rack operatively arranged for movement of the stage relative to the mounting plate in a y-axis; the microscope stage drive mechanism is a unitary device adapted for movement of both the carriage and the specimen

retainer means relative to the stage in an x-axis, and movement of the stage relative to the stage mounting plate in a y-axis (See 19, 23 in Figures 2, 6); the unitary microscope stage drive mechanism comprises an inner drive shaft and an outer drive shaft arranged coaxially with respect to the inner drive shaft (See 19, 23 in Figures 2, 6); and the microscope comprising the drive assembly (See Abstract).

14. Claims 11-12, 14, 16, 25, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Kawashima.

Kawashima discloses the invention as set forth above in Section 11.

Kawashima additionally discloses the second location further comprising the microscope stage drive mechanism and a rack (See for example 19, 22, 25, 30, 13 in Figures 2, 6) operatively arranged to engage the microscope stage drive mechanism; the rack mounted to the stage mounting plate (See 30, 13 in Figures 2, 6), the microscope stage drive mechanism and the rack operatively arranged for movement of the stage relative to the mounting plate in a y-axis; the microscope stage drive mechanism is a unitary device adapted for movement of both the carriage and the specimen retainer means relative to the stage in an x-axis, and movement of the stage relative to the stage mounting plate in a y-axis (See 19, 23 in Figures 2, 6); the unitary microscope stage drive mechanism comprises an inner drive shaft and an outer drive shaft arranged coaxially with respect to the inner drive shaft (See 19, 23 in Figures 2, 6); and the microscope comprising the drive assembly (See Abstract).

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claim 36, as best understood, is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawashima in view of Noguchi et al. (U.S. Patent No. 5172265).

Kawashima discloses a microscope stage assembly (See Figures 1-6), comprising a stage (See for example 1, 5 in Figures 1-3) having a top side and a bottom side; an opening (See 37, 38 in Figures 4-5) in the stage in the form of a linear slot; a carriage (See 17, 3, 15 in Figures 3-5) positioned adjacent to the slot for movement in a direction generally parallel with the slot; a drive means (See for example 19, 23 in Figure 2; See also associated gears in Figures 2, 6) operatively arranged to move the carriage and the stage, wherein the drive means for the carriage and stage are *partly* shielded (in so far as the only portion of the drive means not completely shielded being a part of knobs 19, 23 and attached gears 22, 24 in Figure 2) by the bottom side of the stage (See for example 5 in Figure 2), relative to the stage being viewed from a position above the stage, throughout the full range of motion of the carriage and stage, and the carriage and bearings (See for example 16 in Figure 3) for the carriage are shielded by the bottom side of the stage throughout the full range of motion of the carriage and stage; a specimen retaining means (See 2, 2a, 2b in Figure 1) on the top side of

the stage, wherein the specimen retaining means is removably attached (See for example 14, 17 in Figure 3) to the carriage through the opening in the stage.

Kawashima lacks the drive means for the carriage and stage being *completely* shielded (i.e. the knobs of the drive means also being completely shielded) by the bottom side of the stage. However, Noguchi et al. similarly teaches a conventional microscope with a stage assembly (See for example Figures 1-2). In particular, Noguchi et al. teaches that such stage handles or knobs (See for example 30 in Figures 1-2) may be located such that it is completely shielded by the bottom side of the stage (See 3 in Figures 1-2). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the drive means for the carriage and stage be *completely* shielded (i.e. the knobs of the drive means also being completely shielded) by the bottom side of the stage, as taught by Noguchi et al., in the assembly of Kawashima, to allow for easier use and manipulation of the drive knob, while improving hand stability during use.

Conclusion

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arnel C. Lavarias whose telephone number is 571-272-2315. The examiner can normally be reached on M-F 9:30 AM - 6 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on 571-272-2312. The fax

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phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Arnel C. Lavarias
Primary Examiner
Group Art Unit 2872
11/16/06


ARNEL LAVARIAS
PRIMARY PATENT EXAMINER